

REMARKS

Claims 1-66 are present in this application. Claims 1, 4, 32, and 45 are independent claims.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

§ 102(b) Rejection – Nishimura

Claims 1-18, 23-24, 32-38, 45-53 and 60 have been rejected under 35 U.S.C. § 102(b) as being anticipated by WO 99/50992 to Nishimura (hereafter Nishimura). Applicant respectfully traverses this rejection. The rejection refers to English language equivalent US 2004/0068655. Applicant respectfully requests reconsideration of this rejection.

Claims 1, 4

Claim 1 recites,

“the second communication apparatus generates two or more code signals based on the communication key signal of the second communication apparatus, and transmits all of the code signals to the first communication apparatus using different transfer mediums, respectively, the different transfer mediums being as many as the code signals.”

Independent claims 4, 32, and 45 also recite this feature.

In the section “Response to Arguments,” the Examiner alleges that “different transfer mediums” means non-identical carriers of information. Based on this definition, the Examiner alleges that Nishimura’s “line” between Encryption Means 11 and Decryption Means 21 constitutes the claimed first transfer medium, and that Nishimura’s “line” between Key Encryption Means 12 and Key Restoration Means 22 constitutes the claimed second transfer medium, because the first “line” is not identical to the second “line.” (final Office Action at page 4). Applicant disagrees.

“lines” in Nishimura do not constitute “different transfer mediums”

Applicant submits that the “lines” do not represent physical transfer medium. Instead, the “lines” show information that is transferred and the direction of transfer. Nishimura clearly discloses a single digital interface for each of the set top box and VTR device (digital interfaces D-I/F 114, D-I/F 124, respectively), and discloses that the interface is preferably an IEEE 1394 interface. For example, Fig. 16 of which the invention of Nishimura is based, as well as Fig. 9, each show a single IEEE 1394 bus.

Subsequently, the Examiner’s argument that each “line” represents a different transfer medium would imply that a single IEEE 1394 bus would include a plurality of data transfer lines to achieve data transfer across the plurality of lines. To the contrary, an IEEE 1394 bus is a type of serial bus, which transfers data one bit after another across a single data transfer line.

Furthermore, Nishimura does not disclose a separate interface for each of the “lines” alleged as being the different transfer mediums. The IEEE 1394 interface is generally referred to as “firewire” in the US. The interface commonly has four or six pins (see IEEE 1394 standard). There is no disclosure in Nishimura of a dedicated serial bus for each “line” in Fig. 1, especially since Fig. 1 only shows a single interface at each end.

Applicant submits that according to the Examiner’s definition, Nishimura’s “lines” would at most be understood by one of ordinary skill as being different information transmitted over the same carrier.

For at least these reasons, Applicant submits that the rejection fails to establish *prima facie* anticipation of claims 1, 4, 32, and 45, as well as respective dependent claims. Accordingly, Applicant requests that the rejection be withdrawn.

Claims 3, 17

With respect to the rejection of claims 3 and 17, Applicant had argued that Figs. 1 and 9 of Nishimura pertain to separate embodiments. As evidence of the differences between embodiments, it was argued that Nishimura’s Fig. 9 does not include a “key encryption means.” In the Examiner’s “Response to Arguments,” the Examiner states that both the “KCO generation

means” 39 and the “Encryption means” 38 constitute the key encryption means. Applicant disagrees.

Applicant submits that the Encryption means 38, unlike the key encryption means, does not encrypt a key. Rather Encryption means 38 uses a key (Kco) to encrypt the AV contents (see para. 0186 of Nishimura). In other words, Nishimura does not disclose encryption of key Kco in the context of the third embodiment shown in Fig. 9.

For at least this additional reason, Applicant submits that the rejection fails to establish *prima facie* anticipation for claims 3 and 17.

Claims 32, 45, and 60

Claim 32 is directed to a communication apparatus having a first interface connected to first transfer medium through which an AV data signal including a voice or a picture is transmitted and received, and a second interface connected to a second transfer medium other than the first transfer medium. In other words, claim 32 recites that a communication apparatus (i.e., transmitter or receiver) is provided with both a first interface and a second interface. In contrast, according to Nishimura, as shown in Figs. 1 and 9, a transmitter and a receiver are each provided with only one respective interface (D-I/F 14,15, or data transfer means 44,45).

At least for this reason, Nishimura fails to anticipate at least claim 32, as well as respective dependent claims.

Furthermore, claim 32 is directed to a communication apparatus having a cipher key changeover control unit that performs the specific arithmetic operation using the received first and second code signals.

With respect to the rejection of claim 32, the Examiner continues to rely on teachings in an embodiment shown in Figs. 1 and 2, and an alternative embodiment shown in Fig. 9. In the “Response to Arguments,” the Examiner states that Fig. 9 does disclose a cipher key changeover control unit that decodes the communication key signal. In support of this argument, the

Examiner further states that, Fig. 2 has steps S8 and S10 showing the communication key being decoded based on the first and the second setting key signal. The Examiner further states that in Fig. 9, the Decryption means 51 takes the communication key from the cipher key storage (Kco storage 49) and decrypts using the two codes sent as shown in Fig. 2, as well as the Kex transferred from 46 to 49. Applicant disagrees.

Applicant submits that there is no basis for the assumption that Decryption Means 51 decrypts Kco using two codes sent as shown in Fig. 2. According to para. 0199, the decryption means 51 inputs the encrypted AV contents from the AV contents transmission device 31, also inputs the encryption key Kco from the Kco storage means 49 and the encrypting method from the encryption method storage means 50, and decrypts the encrypted AV contents using the encryption key Kco according to the encrypting method. Nishimura does not disclose that encryption key Kco had previously been encrypted, then is decrypted in the decryption means 51.

For at least these reasons, Applicant submits that Nishimura fails to teach or suggest each and every claimed feature. Accordingly, the rejection fails to establish *prima facie* anticipation. Therefore, Applicant requests that the rejection be reconsidered and withdrawn.

§ 103(a) rejections – Nishimura, Takeda

Claims 19, 29-30 and 61 and 62 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Nishimura.

Claims 25, 26, 41, 42, 56 and 57 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Nishimura in view of U.S. Patent No. 6,512,767 to Takeda (hereafter Takeda).

Claims 27, 28, 43, 44, 58, and 59 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Nishimura, Takeda, and further in view of Leporini.

Claims 19, 25-30, 41-44, 56-59, 61, and 62 are dependent claims. Applicant submits that at least for the reasons above, the rejection fails to establish *prima facie* obviousness. Therefore, Applicant requests that the rejection be reconsidered and withdrawn.

Claims 19, 25-30, 41-44, 56-59, 61, and 62 are dependent claims. Applicant submits that at least for the reasons above, the rejection fails to establish *prima facie* obviousness. Therefore, Applicant requests that the rejection be reconsidered and withdrawn.

In addition, Applicant submits that Takeda fails to make up for the deficiency in Nishimura of failing to teach the claimed “different transfer mediums,” wherein the different transfer mediums are for the two or more code signals.

Rather, Takeda discloses a transmission medium connection device used to connect one type of transmission medium to another type of transmission medium. The present invention, on the other hand, uses a plurality of transfer mediums to transmit, or receive, the two or more data signals.

Conclusion

In view of the above remarks, it is believed that claims are allowable.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert Downs Reg. No. 48,222 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

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